Aquatic Conservation Focus Areas in Greatest Need (Tier I)

Big Hole River (153 River Miles)

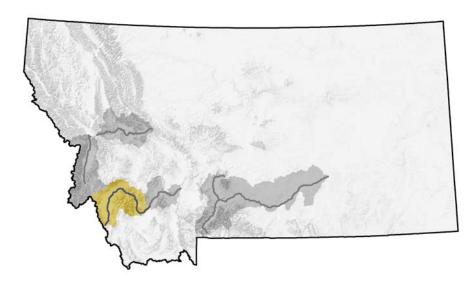


Figure 13. Big Hole River Focus Area

Originally named the Wisdom River by Meriwether Lewis, the Big Hole River and its tributaries start along the border of Montana and Idaho. Surrounded by hay meadows, the upper Big Hole separates the Bitterroot Range on the west from the Pioneer Mountains to the east. The middle section of the river runs through a length of gorge and then glides out through hay meadows once again, where it teams up with the Beaverhead River to create the Jefferson River.

Associated Habitats

Habitat Type	Habitat Tier	Acres	Miles
Intermountain Valley Rivers	II		153
Intermountain Valley Streams	II		967
Lowland Lakes	III	297	
Lowland Reservoirs	III	64	
Mountain Lakes	III	2,886	
Mountain Reservoirs	III	12	
Mountain Streams	I		2,929

Associated Species of Greatest Conservation Need (Tier I Species)

There are a total of 19 aquatic species that are found within the Big Hole River Focus Area. Tier I species are listed below. All associations can be found in Table 19.

Invertebrates: Western Pearlshell

Fish: Westslope Cutthroat Trout, Lake Trout (native lakes), Arctic Grayling, and

Burbot

Conservation Concerns & Strategies

Conservation Concerns	Conservation Strategies	
Diversion of water for irrigation ditches and livestock watering	Increased installation of stockwater wells in place of irrigation ditches	
Entrainment of juvenile and adult fishes by irrigation diversion or other water intakes	Screening or modification of irrigation diversions or other water intakes in a manner that prevents entrainment of fishes	
Riparian vegetation effected by range and forest management practices and streamside residential development (such activities destabilize streambanks, increase sediment inputs, reduced shading, and remove woody debris)	Support government and private conservation activities that encourage and support sustainable land management practices in riparian areas	
	Develop statewide riparian best management principles	
Culverts, dams, irrigation diversions, and other instream barriers that fully or partially impede fish movement and reduce connectivity of habitat	Removal or modification of barriers in a manner that restores fish passage	
Modification and degradation of stream channels caused by various construction or land management practices	Restoration of stream channels, streambanks and riparian areas to a condition that simulates their natural form and function	
Alterations of the quantity or timing of stream flows, causing dewatering or unnatural flow fluctuations that diminish the quantity or quality of essential habitats	Implementation of various water conservation or flow management practices that restore essential habitats, simulate the natural hydrograph and also protect instream flow	
Invasive or exotic plant species	Participate in partnerships to develop and implement weed control strategies as well as invasive species management	

References

Montana Partners for Fish & Wildlife. 2000. Big Hole River Watershed. 4 pp. More information at http://www.r6.fws/gpv/pfw/montana/mt3c.htm.